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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,653	04/05/2000	Tetsuya Kawamoto	8041.093US0	6925

7590

12/06/2001

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EXAMINER

EASTHOM, KARL D

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 12/06/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/543,653

Applicant(s)
Kawamoto et al.

Examiner
Karl Easthom

Art Unit
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 20, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-14, and 21-25 is/are pending in the application.
- 4a) Of the above, claim(s) 9-14 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, and 21-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) Some* c) None of:
- ☒ Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s).
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 20) Other:

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1. Applicant's election of claims reading upon Species 1 (Fig. 1 - Cl. 1-6, 8, and 21-25) without traverse in Paper No. 10 is acknowledged. Accordingly, claims 9-14 have been withdrawn from consideration.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Clem. Clem discloses the claimed invention at Fig. 2. As to claim 4, the leads are bent in a clockwise direction, or concave downwards for example – the same direction at the non-straight part. The bends are approximately semicircular as to claims 3 and 5, and bent in a same direction at adjacent bends. That is, a helix, or twist, comprises parts that are almost a semicircle in almost a plane. Or the twist comprises many almost semicircles joined together for example. The copper plated tin at col. 3, lines 39-43 meets claims 6. NTC is disclosed at col. 2, lines 58-60 – negative temperature coefficient, meeting claim 8. The leads are elastic if they bend.

3. Claims 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Salera. Salera discloses the claimed invention at Fig. 7 with sensing element 17, electrodes 20, 21, cover 16 and lead lines 22, 23 seen partly covered by 16 at Fig. 7 adjacent embedded part 20, 21, with kinked part 22b or 23b. Or cover 16 covers part of 22, 23 but not the kinked part. In claim 22, the bend is in the same outward direction.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofsass or Nakamura et al. in view of Kaneko et al. or Saito et al. Hofsass discloses the claimed invention at Figs. 2b and 4 except the semi circular bend or kink part. In Hofsass, the electrodes are 3, with leads 23 attached by welding, with the cap 38 depicted at Fig. 4 as the insulating cover. Similar remarks apply to the Nakamura device with temperature sensing element 1, electrodes H and insulating covering 1 as seen in Figs. 3, 5 and 6. Kaneko discloses employing the claimed semi-circularly formed kink or bend 8 at Fig. 5 (co. 4) in the leads for the purpose of forming determining the end of insertion of the device, such that it would have been obvious in to employ same in the leads of Hofsass for the stated purpose. Saito discloses bends or kinks at Fig. 4 for circuit board attachment for any electronic component. In claim 22, the same direction is the outward direction where both are bent in the same outward direction – radially from a center line between the device – as to Kaneko, or upwards as to Saito et al. In claim 25, Nakamura discloses the device can by NTC, or PTC, at col. 1, and it would have been obvious to employ either one for temperature sensing where there are only the two well known types.

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over either fo Salera; or Hofsass or Nakamura et al. with Kaneko et al. or Saito et al.; as applied to claims 21-22 above, and further in view of Clem. The noted art discloses the claimed invention except the material of the leads. Clem discloses the material as noted above for lead attachment to a

thermistor, and it would have been obvious to employ the well known material for good lead attachment where thermistors are employed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Applicant's arguments filed 9/20/01 have been fully considered but they are not persuasive, or are moot. Applicant states that the twists of Clem are not "approximately semi-circular". This is not correct where there is almost a semicircle in almost one plane, or the twist comprises many almost semicircles joined together for example. Where the Clem leads can bend and are made as the same claimed material, the argument that they are not elastic is not persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is 703 308-3306. The examiner can normally be reached on M-Th, 5:30AM-4:00PM. If attempts to reach the

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examiner by telephone are unsuccessful, the examiner's supervisor, Michael Gellner can be reached on 703 308-1721. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308-7722 for regular communications and 703 308-7722 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0956.



Karl D Easthom
Primary Examiner
Art Unit 2832

KDE
November 29, 2001